APPENDIX B

The Commonwealth of Massachusetts
State Board of Building Regulations and Standards
Massachusetts State Building Code
780 CMR

FOR MINICIPALITY USE

DIG SAFE NUMBER:

APPLICATION TO CONSTRUCT, REPAIR, RENOVATE, CHANGE THE USE OR OCCUPANCY OF, OR DEMOLISH ANY BUILDING OTHER THAN A ONE OR TWO FAMILY DWELLING

This Section for Official Use Only

Building Permit Number: _____ Date Issued: _____

Signature_____ _____

Building Commissioner/Inspector of Buildings Date

SECTION 1- SITE INFORMATION

1.1 Property Address:

_____

_____

1.2 Assessors Map & Parcel Number:

_____ _____

Map Number Parcel Number

1.3 Zoning Information:

_____ _____

Zoning District Proposed Use

1.4 Property Dimensions:

_____ _____

Lot Area (sf) Frontage (ft)

1.5 Building Setbacks (ft)

Front Yard		Side Yards		Rear Yard	
Required	Provided	Required	Provided	Required	Provided
		/	/		

1.6 Water Supply (M.G.L. c. 40, § 54)
Public ☐ Private ☐

1.7 Flood Zone Information:
Zone:_____ Outside Flood Zone ☐

1.8 Sewage Disposal System:
Municipal ☐ On site disposal system ☐

SECTION 2- PROPERTY OWNERSHIP/AUTHORIZED AGENT

2.1 Owner of Record:

_____ _____

Name (Print) Address:

_____ _____

Signature Telephone

2.2 Authorized Agent:

_____ _____

Name (Print) Address:

_____ _____

Signature Telephone

SECTION 3- CONSTRUCTION SERVICES FOR PROJECTS LESS THAT 35,000 CUBIC FLEET OF ENCLOSED SPACE

3.1 Licensed Construction Supervisor:

_____

Licensed Construction Supervisor:

_____

Address

_____ _____

Signature Telephone

Not Applicable ☐

_____

License Number

_____

Expiration Date

3.2 Registered Home Improvement Contractor:

_____

Company Name

_____

Address

_____ _____

Not Applicable ☐

_____

Registration Number

_____

Expiration Date

SECTION 4 - WORKERS' COMPENSATION INSURANCE AFFIDAVIT (M.G.L. c. 152 § 25C(6))

Workers Compensation Insurance affidavit must be completed and submitted with this application. Failure to provide this affidavit will result in the denial of the issuance of the building permit.

Signed Affidavit Attached Yes.....□ No.....□

SECTION 5- PROFESSIONAL DESIGN AND CONSTRUCTION SERVICES - FOR BUILDINGS AND STRUCTURES SUBJECT TO CONSTRUCTION CONTROL PURSUANT TO 780 CMR 116 (CONTAINING MORE THAN 35,000 C.F. OF ENCLOSED SPACE)

5.1 Registered Architect:

Not Applicable □

Name (Registrant):

Registration Number

Address

Expiration Date

Signature Telephone

5.2 Registered Professional Engineer(s):

Name

Area of Responsibility

Address

Registration Number

Signature Telephone

Expiration Date

Name

Area of Responsibility

Address

Registration Number

Signature Telephone

Expiration Date

Name

Area of Responsibility

Address

Registration Number

Signature Telephone

Expiration Date

Name

Area of Responsibility

Address

Registration Number

Signature Telephone

Expiration Date

5.3 General Contractor

Not Applicable □

Company Name:

Responsible In Charge of Construction

Address

Signature Telephone

SEEKONK WATER DISTRICT

50 Water Lane – P.O. Box 97
Seekonk, Massachusetts 02771

Tel: (508) 761-8170
Fax: (508) 761-9928

1. Owners Name _____

   Address _____

2. FACILITY

   (a) Name _____

   (b) Address _____

   (c) Contact Person/Agent _____

   (d) Telephone No.
   of facility contact person _____

   (e) New Facility _____

   Existing Facility _____

   (f) General description of the type of business or activities carried out at this facility

   _____

   _____

3. DEVICE DATA

   (a) Manufacturer _____ Model No. _____

   (b) RPBP _____ Double Check Valves _____

   (c) Size _____

   (d) Hot or Cold Water Unit _____

   (e) Location of device _____

   (f) Bypass Arrangement Yes _____ No _____

   (g) Service Protected _____

   (h) How many other Reduced Pressure Backflow Preventers (RPBP) and Double Check Valves Assemblies (DCVA) are located in this building? _____

   (i) Gate Valves (OS & Y) Yes _____ No _____

4. Device Maintenance and Testing Schedules

Describe the maintenance and testing schedule of the above device(s) (please refer to 310 CMR 22.22)

_____

_____

_____

_____

5. PLANS REQUIRED

A fully labeled, detailed schematic of the potable and nonpotable water piping immediately surrounding the backflow prevention device installation showing:

(1) height above floor of the device

(2) distance from wall of the device

(3) type of chemical (s) used (if any) and the type of equipment downstream of the device

(4) type of chemical (s) used (if any) and the type of equipment upstream of the device

Please note the schematic must be at least 8 ½ by 11 inches with a completed title block.

Submitted by: _____
of: _____
Date: _____
Telephone No: _____

Plumbers Signature: _____
Plumbers License # _____

Owner/Agent Signature: _____
Date: _____

For Departmental Use

Comments _____

_____

_____

Review Engineer Signature _____

Date: _____

22.22: continued

3. The owner of a cross connection subject to 310 CMR 22.22(9)(d)2 shall register the connection(s) with the public water system . a copy of which shall be retained by the public water system as specified at 310 CMR 22.22.

4. Any owner of existing cross connection(s) who decides to install a protection device specified at 310 CMR 22.22(9)(a), Table 22-1, when the Department has not determined that such a protection device is necessary, shall obtain the prior written approval of the Department or its Designee of the design data sheets for the proposed protection device as specified at 310 CMR 22.22(9)(d)6.

5. Notwithstanding the provisions of 310 CMR 22.22(9)(d)3. and 4., by providing written notification to the owner of a cross connection between a public water system and a fire protection system, the Department or its Designee may, whenever the Department or its designee determines that the cross connection constitutes a threat to the public health, at any time require the installation of a protection device, modify or revoke the approval of a cross connection, or require water quality monitoring.

6. In addition to the requirements set forth in 310 CMR 22.22, the installation and testing of a backflow protection device on a fire protection system may be subject to the requirements of the following:

a. 780 CMR, Massachusetts State Building Code-Fire Protection Systems, Design, Installation, Testing and Maintenance Requirements.

b. 527 CMR, Massachusetts Fire Prevention Regulations, Installation Permits.

c. 250 CMR, board of Registration of Professional Engineers and Land Surveyors, Practice of Engineering and Preparation of Plans and Specifications.

d. 528 CMR, Bureau of Pipe fitters, Refrigeration, and Sprinkler Fitters, Qualification and Licensing of Installers.

e. M.G.L. c. 148, § 27A, Shutting Off of Existing Fire Protection systems and Permitting

f. 248 CMR, State Plumbing and Fuel Gas Code, Permits and Installation.

(10) Approval of Devices for Use in Massachusetts.

(a) Types and models of atmospheric breakers, pressure vacuum breakers/anti-siphon vacuum breakers, backflow preventers with intermediate atmospheric vent, dual check valve preventers, and hose connection vacuum breakers may be used in Massachusetts for certain low hazard applications referred to in the State Plumbing Code shall be those meeting the requirements of, and approved by, the Board of State Examiners of Plumbers and Gas Fitters.

(b) All reduced pressure backflow preventers, double check valve assemblies, and double check detector assemblies used in Massachusetts for the protection of a cross connection in accordance with 310 CMR 22.00 shall meet the standards established by at least one of the following organizations: American Society of Sanitary Engineering (ASSE), American Water Works Association or University of Southern California (U.S.C.) Specifications;

(c) Devices and valves installed on fire protection systems including dual check backflow preventer for residential fire sprinkler systems shall be listed by Underwriters Laboratory (UL) or approved by Factory Mutual Research in accordance with Appendix I of 780 CMR (the State Building Code), unless otherwise approved by the head of the local fire department.

(d) The Department reserves the right to prohibit the use of any cross connection protection devices in Massachusetts if the Department determines that such device is found, after subsequent review, to be defective or to have performed inadequately in the field..

(11) Installation Requirements.

(a) Reduced Pressure Backflow Preventers: Reduced pressure backflow preventers may be used to protect against backflow caused by back pressure or back siphonage and to protect a public water supply system from substances which are hazardous to health only when they are installed in the following manner:

1. For devices installed as in-plant protection, the reduced pressure backflow preventer shall be installed on the owner's side of the water meter on the potable water supply line.

2. Before installing a reduced pressure backflow preventer, all pipelines shall be thoroughly flushed to remove foreign material.

3. Drinking and domestic water lines, lines for safety showers, and lines for eye wash units must be taken off the upstream side of reduced pressure backflow preventers for devices installed as in-plant protection.

22.22: continued

4. The reduced pressure backflow preventer shall be located so as to permit easy access and provide adequate and convenient space for maintenance, inspection, and testing.
5. The owner of the device shall be able to shut down water lines after reasonable notice during normal business hours to permit necessary testing and maintenance of the device, provided that if it is not possible to meet this requirement a by-pass line equipped with an approved type reduced pressure backflow preventer shall be installed.
6. The reduced pressure backflow preventer and shut-off valves must be installed in a horizontal alignment between three and four feet from the floor to the bottom of the device and a minimum of 12 inches from any wall. Vertical installation of devices shall be determined by the public water system.
7. Tightly closing valves must be installed at each end of the device and be immediately accessible unless otherwise approved by the Department or its Designee or public water system.
8. The device must be protected from freezing, flooding, and mechanical damage.
9. If the device is to be installed on a hot water line, a device approved for use at the elevated temperature must be used.
10. If a drain is to be provided for the relief valve port, there must be an approved air gap separation between the port and drain line. To be approved, the air gap must be at least twice the internal diameter of the discharge line.
11. Pit installation shall be approved only as provided in 310 CMR 22.22(11)(f).
12. All water lines shall be color coded according to the state plumbing code, except that water filtration plants, pumping stations, sewage treatment plants and sewage pumping stations shall label all water lines in lieu of color coding.

(b) Double Check Valve Assemblies: Double check valve assemblies may be used to protect against backflow caused by back pressure or back siphonage and to protect a public water supply system from substances which may be objectionable, but not hazardous to health, only if they are installed in the following manner:

1. Drinking and domestic water lines, lines for safety showers, and lines for eye wash units must be taken off the upstream side of the double check valve assembly for devices installed as in-plant protection.
2. The double check valve assembly shall be installed with adequate space to facilitate maintenance, inspection, and testing.
3. The double check valve must be installed horizontally and the top of the double check valve assembly must be between 12 inches and 48 inches from the floor to the bottom of the device and a minimum of 12 inches from any wall. Vertical installation of devices shall be determined by the public water system.
4. If a water meter is not provided on the upstream side of an approved swing-type double check valve assembly, a three to five foot spacer must be installed between the check valves.
5. Tightly closing valves must be installed at each end of the device and be immediately accessible unless otherwise approved by the Department or its Designee.
6. Double check valve assemblies must be readily accessible for testing and service and provided with suitable connections and appurtenances for testing.
7. The device must be protected against flooding, freezing and mechanical damage.
8. Pit installation will be approved only as provided in 310 CMR 22.22(11)(f).

(c) Vacuum Breakers: Vacuum breakers shall not be used to protect against backflow due to back pressure and shall not be installed as protection for high hazard conditions as determined by the Department, its Designee or public water system. Vacuum breakers may be used for low health hazards only if they are installed in the following manner:

1. Vacuum breakers must be installed at least six inches above the flood level rim of the fixture they serve.
2. Atmospheric vacuum breakers must be installed downstream of the last shut off servicing the fixture or equipment.
3. Vacuum breakers must not be installed in locations where the device is subject to corrosive fumes, dust or grit.
4. Vacuum breakers must be protected against flooding, freezing and mechanical damage.

22.22: continued

(g) Maintain on the premises complete records on all devices for the life of said devices including as-built plans and design data sheets; maintain for seven years the Inspection and Maintenance Report Forms for tests conducted by the certified.

(h) Make certain that the cross connection protection device is tested as specified at 310 CMR 22.22(13) or as required by the public water system.

(5) Certified Backflow Prevention Device Tester's Responsibilities. Certified Backflow Prevention Device Testers have the following responsibilities relative to cross connections:

(a) Having a backflow preventer test kit that is maintained in proper working order and calibrated annually;

(b) Recording the test results for each inspection conducted;

(c) Submitting copies of inspection reports to the water supplier, and the owner within 30 days of the inspection; and

(d) Maintaining records of all test results for a minimum of seven years.

(6) Local Plumbing Inspector Responsibilities. Local Plumbing Inspectors, authorized by M.G.L. c. 142 to administer and to enforce 248 CMR 2.00 (the State Plumbing Code), have the following responsibilities relative to cross connections:

(a) As required by 248 CMR 2.14(6), the Inspector of Plumbing will ensure that potable water supply systems are designed, installed and maintained in a manner as to prevent contamination from non-potable liquids, solids or gases which may be introduced to a potable water supply system through cross connections;

(b) After reviewing the plans and specifications for plumbing work under 248 CMR 2.04(5), and before issuing a permit, the Plumbing Inspector, as required by 248 CMR 2.14, shall require the installation of appropriate devices in accordance with 310 CMR 22.00; and

(c) No plumbing permit shall be issued for cross connection installations requiring Reduced Pressure Zone Backflow Preventors or Double Check Valve Assemblies until the application for such permit is accompanied by a letter of approval from the Department, its Designee or public water system.

(7) Installation Approval and Permit Requirements.

(a) Installation Approval.

1. No person shall install or remove or contract with another person for the installation or removal of any reduced pressure backflow preventer or double check valve assembly required by 310 CMR 22.22 unless a design data sheet with plans showing the method of protection of the public water distribution system has been approved by the Department, its Designee or the public water system for the installation of such device.

2. All persons shall obtain approval from the local plumbing inspector or the head of the local fire department, to the extent required by the State Plumbing Code, 248 CMR 2.04(3), or M.G.L. c.148, §27A, for the initial installation or retrofit for any change in the installation of any air gap separation with tank and pump arrangement, reduced pressure backflow preventer, or double check valve assembly.

3. Prior to the installation of any pressure or atmospheric vacuum breaker, backflow preventer with intermediate atmospheric vent, or barometric loop, the plans and specifications for the plumbing work must receive a permit issued pursuant to 248 CMR 2.04(3) by the local Plumbing Inspector. For these devices, a plumbing permit issued under 248 CMR 2.04(3) shall constitute installation approval pursuant to 310 CMR 22.22.

4. All design data sheets and plans for the installation of backflow prevention devices shall be reviewed by a certified cross connection surveyor as of December 31, 1998.

5. Design data sheets and plans for the installation of a backflow prevention device on fire protection systems shall not be approved by the public water system until a building permit has been issued by the Building Official who has jurisdiction over such system in accordance with 780 CMR Chapter 1 and 9 and approval by the head of the local fire department.

22.22: continued

(b) Permit Requirement.

1. Any person owning or maintaining a cross connection protected by a double check valve assembly or a reduced pressure backflow prevention device that was approved by the Department, its designee or public water system shall register such protected cross connection device(s)with the public water system in accordance with 310 CMR 22.22(2). The Department will issue one annual permit to the public water system covering only those registered cross connection devices identified by the public water system in its annual statistical report to the Department.

2. The Department reserves the right to revoke or suspend any conditional approval and/or permit for cause.

(c) The Department may revoke any approval or permit for any installation or change in installation of any backflow prevention device which is found to be in noncompliance with 310 CMR 22.22.

(8) Location of Devices.

(a) The location of each approved backflow prevention device, with respect to the plumbing on the premises and the service connection to the premises, shall be based upon the degree of existing or potentially existing health hazard, and shall conform to the following specific requirements:

1. Approved backflow prevention devices shall be located so that protection of all cross connections is achieved with a minimum number of devices;

2. Approved backflow prevention devices shall be located so as to provide in-plant protection;

3. The following types of facilities have been determined to present high health hazard conditions and in-plant protection shall be supplemented by installation of a reduced pressure backflow preventer or an air gap separation at the meter or property line unless an approved device is installed on a dedicated or process line, or if protection of the in-plant cross connection(s) is achieved to the satisfaction of the Department, its Designee or the public water system at:

a. Nuclear reactors or other facilities where radioactive materials are used;
b. Sewage treatment plants and sewage pumping stations;
c. Piers, docks, marinas, shipyards;
d. Chemical plants;
e. Metal plating industries;
f. Hospitals, mortuaries, medical clinics, dental offices and clinics;
g. Laboratories, except when the Department or its Designee has made a specific determination that no health hazard exists on the premises;
h. Other types of facilities as determined in writing by the Department or its Designee.

(b) If, upon request by the owner of the premises or upon its own initiative, the Department or its Designee or the public water system determines that it is unreasonable to locate all cross connections within the premises, or the Department or its Designee determines that protection of all cross connections is unreasonable for economic reasons, then (1) the public water supply distribution system shall be protected by installation of a reduced pressure backflow preventer or an air gap separation at the meter or property line, and (2) the owner of the premises shall provide a safe, alternative supply of potable water, well marked and labeled, to all domestic water fixtures on the premises.

(9) Types of Backflow Prevention Devices Required.

(a) Subject to the provisions of 310 CMR 22.22(10), Table 310 CMR 22-1 shall serve as the guide for the type of protection required.